

Sequence Listing

<110> Baker, Kevin  
Botstein, David  
Eaton, Dan  
Ferrara, Napoleone  
Filvaroff, Ellen  
Gerritsen, Mary  
Goddard, Audrey  
Godowski, Paul  
Grimaldi, Christopher  
Gurney, Austin  
Hillan, Kenneth  
Kljavin, Ivar  
Napier, Mary  
Roy, Margaret  
Tumas, Daniel  
Wood, William

<120> SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME

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2010 RELEASE UNDER E.O. 14176

09/09/98-09/09/99  
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DRAFT - NOT FOR DISTRIBUTION

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EQUINE SEROTONIN

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Thr Arg Gly Pro Gly Arg Val Ser Cys Lys Asn Ile Lys Pro Glu  
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His Ile Ala Asn Gln Cys Glu Val Gly Gly Leu Arg Leu Glu Ala  
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665 670 675

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680 685 690

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695 700 705

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710 715 720

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725 730 735

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800 805 810

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830 835 840

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845 850 855

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860 865 870

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875 880 885

His Pro Ser Val Pro Pro Phe Gly Glu Met Ser Cys Ile Thr Cys  
890 895 900

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905 910 915

Leu Pro Leu Ser Cys Gly Ser Gly Lys Glu Ser Arg Cys Cys Ser  
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<211> 737

<212> PRT

<213> Homo Sapien

<400> 15

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								20		25			30

Ser	Ser	Leu	Ala	Asn	Pro	Val	Pro	Ala	Ala	Pro	Leu	Ser	Ala	Pro
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Gly	Pro	Cys	Ala	Ala	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Val	Cys	Thr
								50		55				60

Ser	Arg	Pro	Glu	Pro	Asp	Pro	Gln	His	Pro	Ala	Pro	Ala	Gly	Glu
								65		70				75

Pro	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Ala	Gly	Ile	Ser	Gly	Ala	Asn
								80		85				90

Cys	Gln	Leu	Val	Ala	Asp	Pro	Cys	Ala	Ser	Asn	Pro	Cys	His	His
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Gly Asn Cys Ser Ser Ser Ser Ser Ser Asp Gly Tyr Leu

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140	145	150
Arg Gln Leu Gln Pro Val Pro Ala Thr Gln Glu Pro Asp Lys Ile		
155	160	165
Leu Pro Arg Ser Gln Ala Thr Val Thr Leu Pro Thr Trp Gln Pro		
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Lys Thr Gly Gln Lys Val Val Glu Met Lys Trp Asp Gln Val Glu		
185	190	195
Val Ile Pro Asp Ile Ala Cys Gly Asn Ala Ser Ser Asn Ser Ser		
200	205	210
Ala Gly Gly Arg Leu Val Ser Phe Glu Val Pro Gln Asn Thr Ser		
215	220	225
Val Lys Ile Arg Gln Asp Ala Thr Ala Ser Leu Ile Leu Leu Trp		
230	235	240
Lys Val Thr Ala Thr Gly Phe Gln Gln Cys Ser Leu Ile Asp Gly		
245	250	255
Arg Ser Val Thr Pro Leu Gln Ala Ser Gly Gly Leu Val Leu Leu		
260	265	270
Glu Glu Met Leu Ala Leu Gly Asn Asn His Phe Ile Gly Phe Val		
275	280	285
Asn Asp Ser Val Thr Lys Ser Ile Val Ala Leu Arg Leu Thr Leu		
290	295	300
Val Val Lys Val Ser Thr Cys Val Pro Gly Glu Ser His Ala Asn		
305	310	315
Asp Leu Glu Cys Ser Gly Lys Gly Lys Cys Thr Thr Lys Pro Ser		
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Glu Ala Thr Phe Ser Cys Thr Cys Glu Glu Gln Tyr Val Gly Thr		
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Phe Cys Glu Glu Tyr Asp Ala Cys Gln Arg Lys Pro Cys Gln Asn		
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Asn Ala Ser Cys Ile Asp Ala Asn Glu Lys Gln Asp Gly Ser Asn		
365	370	375
Phe Thr Cys Val Cys Leu Pro Gly Tyr Thr Gly Glu Leu Cys Gln		
380	385	390
Ser Lys Ile Asp Tyr Cys Ile Leu Asp Pro Cys Arg Asn Gly Ala		
395	400	405

Thr Cys Ile Ser Ser Leu Ser Gly Phe Thr Cys Gln Cys Pro Glu  
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Gly Tyr Phe Gly Ser Ala Cys Glu Glu Lys Val Asp Pro Cys Ala  
425 430 435

Ser Ser Pro Cys Gln Asn Asn Gly Thr Cys Tyr Val Asp Gly Val  
440 445 450

His Phe Thr Cys Asn Cys Ser Pro Gly Phe Thr Gly Pro Thr Cys  
455 460 465

Ala Gln Leu Ile Asp Phe Cys Ala Leu Ser Pro Cys Ala His Gly  
470 475 480

Thr Cys Arg Ser Val Gly Thr Ser Tyr Lys Cys Leu Cys Asp Pro  
485 490 495

Gly Tyr His Gly Leu Tyr Cys Glu Glu Tyr Asn Glu Cys Leu  
500 505 510

Ser Ala Pro Cys Leu Asn Ala Ala Thr Cys Arg Asp Leu Val Asn  
515 520 525

Gly Tyr Glu Cys Val Cys Leu Ala Glu Tyr Lys Gly Thr His Cys  
530 535 540

Glu Leu Tyr Lys Asp Pro Cys Ala Asn Val Ser Cys Leu Asn Gly  
545 550 555

Ala Thr Cys Asp Ser Asp Gly Leu Asn Gly Thr Cys Ile Cys Ala  
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Pro Gly Phe Thr Gly Glu Glu Cys Asp Ile Asp Ile Asn Glu Cys  
575 580 585

Asp Ser Asn Pro Cys His His Gly Gly Ser Cys Leu Asp Gln Pro  
590 595 600

Asn Gly Tyr Asn Cys His Cys Pro His Gly Trp Val Gly Ala Asn  
605 610 615

Cys Glu Ile His Leu Gln Trp Lys Ser Gly His Met Ala Glu Ser  
620 625 630

Leu Thr Asn Met Pro Arg His Ser Leu Tyr Ile Ile Ile Gly Ala  
635 640 645

Leu Cys Val Ala Phe Ile Leu Met Leu Ile Ile Leu Ile Val Gly  
650 655 660

Ile Cys Arg Ile Ser Arg Ile Glu Tyr Gln Gly Ser Ser Arg Pro  
665 670 675

Ala Tyr Glu Glu Phe Tyr Asn Cys Arg Ser Ile Asp Ser Glu Phe  
680 685 690

Ser Asn Ala Ile Ala Ser Ile Arg His Ala Arg Phe Gly Lys Lys

695

700

705

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Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr Leu Ile Lys Thr Lys  
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Asp Leu

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<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

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<210> 17  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 17  
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<210> 18  
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<213> Homo Sapien

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acgaaaatgtt gacccccc tt tcaggcttc agggggactg gtcctccctgg 100  
aggagatgtt cgccttgggg aataatcaact ttattggttt tgtgaatgtat 150  
tctgtgacta agtctattgt ggctttgcgc tttaactctgg tggtaaggt 200  
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tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350  
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aagatgggag caatttcacc tgtgtttgcc ttccctggta tactggagag 450  
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<210> 19  
<211> 508  
<212> DNA  
<213> Homo Sapien

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taggggag 508

<210> 20  
<211> 23  
<212> DNA  
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<220>  
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<210> 21  
<211> 24  
<212> DNA  
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<220>  
<223> Synthetic oligonucleotide probe

<400> 21  
ctcagttcgg ttggcaaagc tctc 24

<210> 22  
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<212> DNA  
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<220>

<223> Synthetic oligonucleotide probe

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<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

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<210> 24  
<211> 433  
<212> PRT  
<213> Homo Sapien

<400> 24  
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35 40 45  
Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser  
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Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly  
65 70 75  
Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg  
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Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu  
125 130 135  
Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe  
140 145 150  
Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn  
155 160 165  
Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr  
170 175 180

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Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala  
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200 205 210  
Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val  
215 220 225  
Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg  
230 235 240  
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245 250 255  
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260 265 270  
Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys  
275 280 285  
Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp  
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Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr  
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335 340 345  
Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu  
350 355 360  
Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser  
365 370 375  
Asp Leu Ser Arg Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln  
380 385 390  
Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala  
395 400 405  
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410 415 420  
Ala Val Val Ala Thr Phe Pro Val Leu Ile Leu Trp Leu  
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<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 25  
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<210> 26  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 26  
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<210> 27  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 27  
ctccaccaat cccgatgaac ttgg 24

<210> 28  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 28  
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<210> 29  
<211> 1416  
<212> DNA  
<213> Homo Sapien

<400> 29  
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cctcctattc tgagctggag cttgtgaccc cggtctaaagc tctgaacgac 450  
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cagtctcaga gtcctcccc caccctgaca aaactcacac atgcccaccc 1350  
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<210> 30  
<211> 446  
<212> PRT  
<213> Homo Sapien

<400> 30  
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20 25 30  
Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln  
35 40 45  
Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser

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50

55

60

Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly  
65 70 75

Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg  
80 85 90

Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg  
95 100 105

Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys  
110 115 120

Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu  
125 130 135

Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe  
140 145 150

Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn  
155 160 165

Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr  
170 175 180

Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala  
185 190 195

Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His Val Ser  
200 205 210

Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val  
215 220 225

Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg  
230 235 240

Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly  
245 250 255

Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro  
260 265 270

Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys  
275 280 285

Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp  
290 295 300

Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr  
305 310 315

Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu  
320 325 330

Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg  
335 340 345

Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu  
350 355 360

Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser  
365 370 375

Asp Leu Ser Arg Leu Arg Gln Ser Leu Thr Ser Gly Gln  
380 385 390

Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala  
395 400 405

Lys Trp Ser Val Ser Glu Ser Ser Pro His Pro Asp Lys Thr His  
410 415 420

Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser  
425 430 435

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr  
440 445

<210> 31

<211> 1790

<212> DNA

<213> Homo Sapien

<400> 31

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atccgcgcgg cggccgcgc cgttgctgcc cctgctgctg ctgctctg 200  
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ggagaccttc ctccacacca actactccct caagtacaag ctttagtggt 650  
atggccagga caacacatgt gaggagtacc acacagtggg gccccactcc 700  
tgccacatcc ccaaggaccc ggctctcttt acgcccatacg agatctgggt 750  
ggaggccacc aaccgcctgg gctctggccc ctccgatgtc ctcacgctgg 800

DRAFT GENOME SEQUENCING

atatcctgga tgtggtgacc acggacccccc cgccccacgt gcacgtgagc 850  
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tcctgcccgc tggccggcct gaaaccggc accgtgtact tcgtgcaagt 1050  
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gcccgtgcgg cgcgagctca agcagttcct gggctggctc aagaagcacg 1250  
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atgcagaagt cgccacaagac ccgcaaccag gacgagggga tcctgcccctc 1350  
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aaaaaaaaaaa aaaaaaaaaaaa aaaaacaaaaa aaaaaaaaaaaa 1790

<210> 32  
<211> 422  
<212> PRT  
<213> Homo Sapien

<400> 32  
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1 5 10 15  
Pro Pro Pro Leu Leu Pro Leu Leu Leu Leu Cys Val Leu Gly  
20 25 30  
Ala Pro Arg Ala Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro  
35 40 45  
Gln Asp Pro Thr Leu Leu Ile Gly Ser Ser Leu Leu Ala Thr Cys  
50 55 60

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Ser Val His Gly Asp Pro Pro Gly Ala Thr Ala Glu Gly Leu Tyr  
65 70 75  
Trp Thr Leu Asn Gly Arg Arg Leu Pro Pro Glu Leu Ser Arg Val  
80 85 90  
Leu Asn Ala Ser Thr Leu Ala Leu Ala Leu Ala Asn Leu Asn Gly  
95 100 105  
Ser Arg Gln Arg Ser Gly Asp Asn Leu Val Cys His Ala Arg Asp  
110 115 120  
Gly Ser Ile Leu Ala Gly Ser Cys Leu Tyr Val Gly Leu Pro Pro  
125 130 135  
Glu Lys Pro Val Asn Ile Ser Cys Trp Ser Lys Asn Met Lys Asp  
140 145 150  
Leu Thr Cys Arg Trp Thr Pro Gly Ala His Gly Glu Thr Phe Leu  
155 160 165  
His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu Arg Trp Tyr Gly Gln  
170 175 180  
Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly Pro His Ser Cys  
185 190 195  
His Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr Glu Ile Trp  
200 205 210  
Val Glu Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp Val Leu  
215 220 225  
Thr Leu Asp Ile Leu Asp Val Val Thr Thr Asp Pro Pro Pro Asp  
230 235 240  
Val His Val Ser Arg Val Gly Gly Leu Glu Asp Gln Leu Ser Val  
245 250 255  
Arg Trp Val Ser Pro Pro Ala Leu Lys Asp Phe Leu Phe Gln Ala  
260 265 270  
Lys Tyr Gln Ile Arg Tyr Arg Val Glu Asp Ser Val Asp Trp Lys  
275 280 285  
Val Val Asp Asp Val Ser Asn Gln Thr Ser Cys Arg Leu Ala Gly  
290 295 300  
Leu Lys Pro Gly Thr Val Tyr Phe Val Gln Val Arg Cys Asn Pro  
305 310 315  
Phe Gly Ile Tyr Gly Ser Lys Lys Ala Gly Ile Trp Ser Glu Trp  
320 325 330  
Ser His Pro Thr Ala Ala Ser Thr Pro Arg Ser Glu Arg Pro Gly  
335 340 345  
Pro Gly Gly Ala Cys Glu Pro Arg Gly Gly Glu Pro Ser Ser

350                    355                    360

Gly Pro Val Arg Arg Glu Leu Lys Gln Phe Leu Gly Trp Leu Lys  
365                    370                    375

Lys His Ala Tyr Cys Ser Asn Leu Ser Phe Arg Leu Tyr Asp Gln  
380                    385                    390

Trp Arg Ala Trp Met Gln Lys Ser His Lys Thr Arg Asn Gln Asp  
395                    400                    405

Glu Gly Ile Leu Pro Ser Gly Arg Arg Gly Thr Ala Arg Gly Pro  
410                    415                    420

Ala Arg

<210> 33  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 33  
cccgccccgac gtgcacgtga gcc 23

<210> 34  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 34  
tgagccagcc caggaactgc ttg 23

<210> 35  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 35  
caagtgcgt gcaaccctt tggcatctat ggctccaaga aagccggat 50

<210> 36  
<211> 1771  
<212> DNA  
<213> Homo Sapien

<400> 36  
cccacgcgtc cgctggtgtt agatcgagca accctctaaa agcagtttag 50

TOP SECRET - SECURITY INFORMATION

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atgaaatttc ttctggacat cctccgtctt ctcccgttac tgatcgcttg 150  
ctccctagag tccttcgtga agcttttat tcctaagagg agaaaatcag 200  
tcaccggcga aatcgctgctg attacaggag ctggcatgg aattgggaga 250  
ctgactgcct atgaatttgc taaacttaaa agcaagctgg ttctctggga 300  
tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350  
gtgccaaggt tcatacctt gtggtagact gcagcaaccg agaagatatt 400  
tacagctctg caaagaaggt gaaggcagaa attggagatg ttagtatttt 450  
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agaaaacttca agctctctaa ataaaaatgaa ggactatatac tagtggatt 1450  
tcacaatgaa tatcatgaac tctcaatggg tagtttcat cctaccatt 1500

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<210> 37  
<211> 300  
<212> PRT  
<213> Homo Sapien

<400> 37  
Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Pro Leu Leu Ile  
1 5 10 15  
Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg  
20 25 30  
Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly  
35 40 45  
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys  
50 55 60  
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu  
65 70 75  
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe  
80 85 90  
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys  
95 100 105  
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn  
110 115 120  
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro  
125 130 135  
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp  
140 145 150  
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly  
155 160 165  
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro  
170 175 180  
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe  
185 190 195  
His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly

200                    205                    210

Val Lys Thr Thr Cys Leu Cys Pro Asn Phe Val Asn Thr Gly Phe  
215                    220                    225

Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro Thr Leu Glu Pro Glu  
230                    235                    240

Glu Val Val Asn Arg Leu Met His Gly Ile Leu Thr Glu Gln Lys  
245                    250                    255

Met Ile Phe Ile Pro Ser Ser Ile Ala Phe Leu Thr Thr Leu Glu  
260                    265                    270

Arg Ile Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile  
275                    280                    285

Ser Val Lys Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln  
290                    295                    300

<210> 38

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 38

ggtgaaggca gaaattggag atg 23

<210> 39

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 39

atcccatgca tcagcctgtt tacc 24

<210> 40

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 40

gctgggtgtag tctatacatac agattttttt gctacacaag atcctcag 48

<210> 41

<211> 1377

<212> DNA

<213> Homo Sapien

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0

<400> 41  
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gogcgggggc tggagcacca ccaactggag ggtccggagt agcgagcgcc 150  
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aaaaaaaaaaa aaaaaaaaaa aaaaaaaa 1377

<210> 42

<211> 243  
<212> PRT  
<213> Homo Sapien

<400> 42  
Met Arg Pro Leu Leu Val Leu Leu Leu Gly Leu Ala Ala Gly  
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Ser Pro Pro Leu Asp Asp Asn Lys Ile Pro Ser Leu Cys Pro Gly  
20 25 30  
His Pro Gly Leu Pro Gly Thr Pro Gly His His Gly Ser Gln Gly  
35 40 45  
Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Asp Gly Ala Pro Gly  
50 55 60  
Ala Pro Gly Glu Lys Gly Glu Gly Gly Arg Pro Gly Leu Pro Gly  
65 70 75  
Pro Arg Gly Asp Pro Gly Pro Arg Gly Glu Ala Gly Pro Ala Gly  
80 85 90  
Pro Thr Gly Pro Ala Gly Glu Cys Ser Val Pro Pro Arg Ser Ala  
95 100 105  
Phe Ser Ala Lys Arg Ser Glu Ser Arg Val Pro Pro Pro Ser Asp  
110 115 120  
Ala Pro Leu Pro Phe Asp Arg Val Leu Val Asn Glu Gln Gly His  
125 130 135  
Tyr Asp Ala Val Thr Gly Lys Phe Thr Cys Gln Val Pro Gly Val  
140 145 150  
Tyr Tyr Phe Ala Val His Ala Thr Val Tyr Arg Ala Ser Leu Gln  
155 160 165  
Phe Asp Leu Val Lys Asn Gly Glu Ser Ile Ala Ser Phe Phe Gln  
170 175 180  
Phe Phe Gly Trp Pro Lys Pro Ala Ser Leu Ser Gly Gly Ala  
185 190 195  
Met Val Arg Leu Glu Pro Glu Asp Gln Val Trp Val Gln Val Gly  
200 205 210  
Val Gly Asp Tyr Ile Gly Ile Tyr Ala Ser Ile Lys Thr Asp Ser  
215 220 225  
Thr Phe Ser Gly Phe Leu Val Tyr Ser Asp Trp His Ser Ser Pro  
230 235 240  
Val Phe Ala

<210> 43  
<211> 24

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 43  
tacaggccca gtcaggacca gggg 24

<210> 44  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 44  
agccagcctc gctctcg 18

<210> 45  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 45  
gtctgcgatc aggtctgg 18

<210> 46  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 46  
gaaagaggca atggattcgc 20

<210> 47  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 47  
gacttacact tgccagcaca gcac 24

<210> 48  
<211> 45  
<212> DNA  
<213> Artificial Sequence

TOTAL 80

<220>

<223> Synthetic oligonucleotide probe

<400> 48

ggagcaccac caactggagg gtccggagta gcgagcgccc cgaag 45

0

<210> 49

<211> 1876

<212> DNA

<213> Homo Sapien

<400> 49

ctctttgtc caccagccca gcctgactcc tggagattgt gaatagctcc 50

atccagcctg agaaaacaagc cgggtggctg agccaggctg tgcacggagc 100

acctgacggg cccaacagac ccatgctgca tccagagacc tcccctggcc 150

gggggcacatct cctggctgtg ctccctggccc tccttggcac cacctggca 200

gaggtgtggc caccggcagct gcaggagcag gtcggatgg ccggagccct 250

gaacaggaag gagagtttct tgctcctctc cctgcacaac cgccctgcgca 300

gctgggtcca gccccctgcg gctgacatgc ggaggctgga ctggagtgac 350

agcctggccc aactggctca agccagggca gccctctgtg gaatccaaac 400

cccgagcctg gcatccggcc tgtggcgcac cctgcaagtg ggctggaaca 450

tgcagctgtc gccccgggc ttggcgtcct ttgttgaagt ggtcagccta 500

tggtttgcag aggggcagcg gtacagccac gcggcaggag agtgtgctcg 550

caacgccacc tgcacccact acacgcagct cgtgtggcc acctaagcc 600

agctgggctg tggggggcac ctgtgctctg caggccagac agcgataagaa 650

gcctttgtct gtgcctactc ccccgaggc aactggagg tcaacggaa 700

gacaatcatc ccctataaga agggtgcctg gtgttcgctc tgcacagcca 750

gtgtctcagg ctgcttcaaa gcctgggacc atgcaggggg gctctgtgag 800

gtccccagga atccctgtcg catgagctgc cagaaccatg gacgtctcaa 850

catcagcacc tgccactgcc actgtccccc tggctacacg ggcagataact 900

gccaagtgag gtgcagcctg cagtgtgtgc acggccgggt ccgggaggag 950

gagtgctcgt gcgtctgtga catcggtac gggggagccc agtgtgcccac 1000

caaggtgcat tttcccttcc acacctgtga cctgaggatc gacggagact 1050

gtttcatggt gtcttcagag gcagacacct attacagagc caggatgaaa 1100

tgtcagagga aaggcggggt gctggcccaag atcaagagcc agaaagtgca 1150

ggacatcctc gccttctatc tggccgcct ggagaccacc aacgaggta 1200  
ctgacagtga ctgcgagacc aggaacttct ggatcggtcacctacaag 1250  
accgccaagg actccttcgg ctggccaca ggggagcacc aggccttcac 1300  
cagtttgcc tttggcagc ctgacaacca cgggctggtg tggctgagtg 1350  
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ccacctgtct ggaacaaggg ccaggttaag accacatgcc tcatgtccaa 1600  
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gaggccagtg agggccaggg agtgagtgtt agaagaagct gggcccttc 1700  
gcctgcttt gattggaaag atgggcttca attagatggc gaaggagagg 1750  
acaccgcccag tggtccaaaa aggctgctct cttccacctg gcccagaccc 1800  
tgtggggcag cggagcttcc ctgtggcatg aaccccacgg ggtattaaat 1850  
tatgaatcag ctgaaaaaaaaaaaaa 1876

<210> 50  
<211> 455  
<212> PRT  
<213> Homo Sapien

<400> 50  
Met Leu His Pro Glu Thr Ser Pro Gly Arg Gly His Leu Leu Ala  
1 5 10 15  
Val Leu Leu Ala Leu Leu Gly Thr Thr Trp Ala Glu Val Trp Pro  
20 25 30  
Pro Gln Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg  
35 40 45  
Lys Glu Ser Phe Leu Leu Leu Ser Leu His Asn Arg Leu Arg Ser  
50 55 60  
Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser  
65 70 75  
Asp Ser Leu Ala Gln Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly  
80 85 90  
Ile Pro Thr Pro Ser Leu Ala Ser Gly Leu Trp Arg Thr Leu Gln  
95 100 105  
Val Gly Trp Asn Met Gln Leu Leu Pro Ala Gly Leu Ala Ser Phe

DRAFT - DO NOT CITE

110	115	120
Val Glu Val Val Ser Leu Trp Phe Ala	Glu Gly Gln Arg Tyr Ser	
125	130	135
His Ala Ala Gly Glu Cys Ala Arg Asn Ala	Thr Cys Thr His Tyr	
140	145	150
Thr Gln Leu Val Trp Ala Thr Ser Ser Gln	Leu Gly Cys Gly Arg	
155	160	165
His Leu Cys Ser Ala Gly Gln Thr Ala Ile	Glu Ala Phe Val Cys	
170	175	180
Ala Tyr Ser Pro Gly Gly Asn Trp Glu Val	Asn Gly Lys Thr Ile	
185	190	195
Ile Pro Tyr Lys Lys Gly Ala Trp Cys Ser	Leu Cys Thr Ala Ser	
200	205	210
Val Ser Gly Cys Phe Lys Ala Trp Asp His	Ala Gly Gly Leu Cys	
215	220	225
Glu Val Pro Arg Asn Pro Cys Arg Met	Ser Cys Gln Asn His Gly	
230	235	240
Arg Leu Asn Ile Ser Thr Cys His Cys His	Cys Pro Pro Gly Tyr	
245	250	255
Thr Gly Arg Tyr Cys Gln Val Arg Cys Ser	Leu Gln Cys Val His	
260	265	270
Gly Arg Phe Arg Glu Glu Cys Ser Cys Val	Cys Asp Ile Gly	
275	280	285
Tyr Gly Gly Ala Gln Cys Ala Thr Lys Val	His Phe Pro Phe His	
290	295	300
Thr Cys Asp Leu Arg Ile Asp Gly Asp Cys	Phe Met Val Ser Ser	
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Glu Ala Asp Thr Tyr Tyr Arg Ala Arg Met	Lys Cys Gln Arg Lys	
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Gly Gly Val Leu Ala Gln Ile Lys Ser Gln	Lys Val Gln Asp Ile	
335	340	345
Leu Ala Phe Tyr Leu Gly Arg Leu Glu Thr	Thr Asn Glu Val Thr	
350	355	360
Asp Ser Asp Phe Glu Thr Arg Asn Phe Trp	Ile Gly Leu Thr Tyr	
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Lys Thr Ala Lys Asp Ser Phe Arg Trp Ala	Thr Gly Glu His Gln	
380	385	390
Ala Phe Thr Ser Phe Ala Phe Gly Gln Pro	Asp Asn His Gly Leu	
395	400	405

Val Trp Leu Ser Ala Ala Met Gly Phe Gly Asn Cys Val Glu Leu  
410 415 420

Gln Ala Ser Ala Ala Phe Asn Trp Asn Asp Gln Arg Cys Lys Thr  
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Trp Gly Pro Gly Ser  
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<223> Synthetic oligonucleotide probe

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<220>  
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<210> 53  
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<212> DNA  
<213> Artificial Sequence

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<210> 54  
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<213> Homo Sapien

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gctgtccctg tgtgtgggt cgccaggaaga ggcgcagagc tggggccact 150  
cttcggagca ggatggactc agggtccccga ggcaagtca gactgttgca 200

DRAFT - DO NOT CITE

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35 40 45  
Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile  
50 55 60  
Ile Ser Arg Tyr Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn  
65 70 75  
Arg Ala Ser Glu Asp Gln Asp Ile Glu Phe Gln Met Gln Ile Pro  
80 85 90  
Ala Ala Ala Phe Ile Thr Asn Phe Thr Met Leu Ile Gly Asp Lys  
95 100 105  
Val Tyr Gln Gly Glu Ile Thr Glu Arg Glu Lys Lys Ser Gly Asp  
110 115 120

BIOLOGICAL  
PROBLEMS

Arg Val Lys Glu Lys Arg Asn Lys Thr Thr Glu Glu Asn Gly Glu  
125 130 135  
Lys Gly Thr Glu Ile Phe Arg Ala Ser Ala Val Ile Pro Ser Lys  
140 145 150  
Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu Glu Leu Leu Gln Arg  
155 160 165  
Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val Arg Pro Gln Gln  
170 175 180  
Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu Glu Ser Ala  
185 190 195  
Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser Arg Gln  
200 205 210  
Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser  
215 220 225  
Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys  
230 235 240  
Pro Thr Val Val Gln Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu  
245 250 255  
Gly Asp Phe Ile Ile Arg Tyr Asp Val Asn Arg Glu Gln Ser Ile  
260 265 270  
Gly Asp Ile Gln Val Leu Asn Gly Tyr Phe Val His Tyr Phe Ala  
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Pro Lys Asp Leu Pro Pro Leu Pro Lys Asn Val Val Phe Val Leu  
290 295 300  
Asp Ser Ser Ala Ser Met Val Gly Thr Lys Leu Arg Gln Thr Lys  
305 310 315  
Asp Ala Leu Phe Thr Ile Leu His Asp Leu Arg Pro Gln Asp Arg  
320 325 330  
Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys Val Trp Lys Asp  
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His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp Gly Lys Val  
350 355 360  
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365 370 375  
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Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr  
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Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu		
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Ser Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu		
455	460	465
Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr		
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Pro Leu Leu Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val		
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Val Gln Ala Thr Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser		
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Glu Ile Ile Ile Ala Gly Lys Leu Val Asp Arg Lys Leu Asp His		
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Leu His Val Glu Val Thr Ala Ser Asn Ser Lys Lys Phe Ile Ile		
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Leu Lys Thr Asp Val Pro Val Arg Pro Gln Lys Ala Gly Lys Asp		
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Val Thr Gly Ser Pro Arg Pro Gly Gly Asp Gly Glu Gly Asp Thr		
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Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly		
650	655	660
Pro Leu Leu Lys Lys Pro Asn Ser Val Lys Lys Lys Gln Asn Lys		
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EOTIE 96844660

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<223> Synthetic oligonucleotide probe  
  
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<210> 58  
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<223> Synthetic oligonucleotide probe  
  
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agccgctcct tctccggttc atcg 24  
  
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<213> Homo Sapien  
  
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aatctgttta cggaaagacgt gacagtgtac gagggagagg ttgcgaccat 200

四百三十一

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<212> PRT  
<213> Homo Sapien
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Phe Ser Ala Ala Ala Leu Ile Pro Thr Gly Asp Gly Gln Asn Leu  
35 40 45

Phe Thr Lys Asp Val Thr Val Ile Glu Gly Glu Val Ala Thr Ile  
50 55 60

Ser Cys Gln Val Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu  
65 70 75

Asn Pro Asn Arg Gln Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu  
80 85 90

Lys Asp Ser Arg Phe Gln Leu Leu Asn Phe Ser Ser Ser Glu Leu  
95 100 105

Lys Val Ser Leu Thr Asn Val Ser Ile Ser Asp Glu Gly Arg Tyr  
110 115 120

Phe Cys Gln Leu Tyr Thr Asp Pro Pro Gln Glu Ser Tyr Thr Thr  
125 130 135

Ile Thr Val Leu Val Pro Pro Arg Asn Leu Met Ile Asp Ile Gln  
140 145 150

Lys Asp Thr Ala Val Glu Gly Glu Glu Ile Glu Val Asn Cys Thr  
155 160 165

Ala Met Ala Ser Lys Pro Ala Thr Thr Ile Arg Trp Phe Lys Gly  
170 175 180

Asn Thr Glu Leu Lys Gly Lys Ser Glu Val Glu Glu Trp Ser Asp  
185 190 195

Met Tyr Thr Val Thr Ser Gln Leu Met Leu Lys Val His Lys Glu  
200 205 210

Asp Asp Gly Val Pro Val Ile Cys Gln Val Glu His Pro Ala Val  
215 220 225

Thr Gly Asn Leu Gln Thr Gln Arg Tyr Leu Glu Val Gln Tyr Lys  
230 235 240

Pro Gln Val His Ile Gln Met Thr Tyr Pro Leu Gln Gly Leu Thr  
245 250 255

Arg Glu Gly Asp Ala Leu Glu Leu Thr Cys Glu Ala Ile Gly Lys  
260 265 270

Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met  
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350 355 360

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Gly Gly Val Val Ala Val Val Val Phe Ala Met Leu Cys Leu Leu  
380 385 390

Ile Ile Leu Gly Arg Tyr Phe Ala Arg His Lys Gly Thr Tyr Phe  
395 400 405

Thr His Glu Ala Lys Gly Ala Asp Asp Ala Ala Asp Ala Asp Thr  
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Lys Glu Tyr Phe Ile  
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<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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<210> 63

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 63

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<210> 64

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<400> 66  
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<210> 68  
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<212> DNA  
<213> Homo Sapien

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TOP SECRET

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PROTEIN SEQUENCES

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<211> 598  
<212> PRT  
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35 40 45  
Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe  
50 55 60  
Glu Asn Gly Ile Thr Met Leu Asp Ala Ser Ser Phe Ala Gly Leu  
65 70 75  
Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser  
80 85 90  
Leu Arg Leu Pro Arg Leu Leu Leu Asp Leu Ser His Asn Ser  
95 100 105  
Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu

Document Release Date

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125	130	135
Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp		
140	145	150
Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly		
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Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu		
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185	190	195
Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly		
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Ser His Val Thr Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe		
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Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala		
260	265	270
Asp Phe Gly Cys Pro Ala Thr Thr Thr Ala Thr Val Pro Thr		
275	280	285
Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu		
290	295	300
Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro		
305	310	315
Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln		
320	325	330
Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys		
335	340	345
His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly		
350	355	360
Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg		
365	370	375
Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr		
380	385	390
Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu		
395	400	405

Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg  
410 415 420

Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr  
425 430 435

Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu  
440 445 450

Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro  
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Gly Arg Val Pro Glu Gly Glu Ala Cys Gly Glu Ala His Thr  
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Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg  
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Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val  
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Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg  
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Arg Gly Arg Ala Met Ala Ala Ala Gln Asp Lys Gly Gln Val  
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Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro  
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Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Glu Ala Leu  
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<223> Synthetic oligonucleotide probe

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<400> 74  
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<213> Homo Sapien

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<212> PRT  
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<400> 76

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		20				25							30	
Leu	Trp	Leu	Ser	Trp	Gly	Ala	Ala	Leu	Gly	Ala	Val	Ala	Cys	Ala
		35					40						45	
Met	Ala	Leu	Leu	Thr	Gln	Gln	Thr	Glu	Leu	Gln	Ser	Leu	Arg	Arg
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Glu	Val	Ser	Arg	Leu	Gln	Gly	Thr	Gly	Gly	Pro	Ser	Gln	Asn	Gly
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Glu	Gly	Tyr	Pro	Trp	Gln	Ser	Leu	Pro	Glu	Gln	Ser	Ser	Asp	Ala
				80				85					90	
Leu	Glu	Ala	Trp	Glu	Asn	Gly	Glu	Arg	Ser	Arg	Lys	Arg	Arg	Ala
				95					100				105	
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Gln Gly Tyr Gly Val Arg Ile Gln Asp Ala Gly Val Tyr Leu Leu  
155 160 165  
  
Tyr Ser Gln Val Leu Phe Gln Asp Val Thr Phe Thr Met Gly Gln  
170 175 180  
  
Val Val Ser Arg Glu Gly Gln Gly Arg Gln Glu Thr Leu Phe Arg  
185 190 195  
  
Cys Ile Arg Ser Met Pro Ser His Pro Asp Arg Ala Tyr Asn Ser  
200 205 210  
  
Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp Ile Leu  
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<210> 77  
<211> 2849  
<212> DNA  
<213> Homo Sapien

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DRAFT - NOT FOR USE

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<211> 281

<212> PRT

<213> Homo Sapien

<400> 78

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Leu	Ala	Phe	Ala	Ser	Gly	Leu	Val	Leu	Ser	Arg	Val	Pro	His	Val
					20				25					30

Gln	Gly	Glu	Gln	Gln	Glu	Trp	Glu	Gly	Thr	Glu	Glu	Leu	Pro	Ser
					35				40					45

Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr
				50				55						60

Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg
			65						70					75

Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro
				80				85						90

Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly
					95				100					105

Asp Arg Gly Leu Gln Gly Lys Tyr Gly Lys Thr Gly Ser Ala Gly

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115

120

Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly  
125 130 135

Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val  
140 145 150

Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val  
155 160 165

Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met  
170 175 180

Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe  
185 190 195

Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His  
200 205 210

Ile Met Lys Asn Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val  
215 220 225

Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu  
230 235 240

Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg  
245 250 255

Glu Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe  
260 265 270

Ser Gly Tyr Leu Val Lys His Ala Thr Glu Pro  
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<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 79

tacaggccca gtcaggacca gggg 24

<210> 80

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 80

ctgaagaagt agaggccggg cacg 24

<210> 81

<211> 45  
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<212> DNA  
<213> Homo Sapien

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<212> PRT  
<213> Homo Sapien

<400> 83  
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DRAFT

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20 25 30

Lys Lys Ser Leu Glu Asp Val Val Ile Asp Ile Gln Ser Ser Leu  
35 40 45

Ser Lys Gly Ile Arg Gly Asn Glu Pro Val Tyr Thr Ser Thr Gln  
50 55 60

Glu Asp Cys Ile Asn Ser Cys Cys Ser Thr Lys Asn Ile Ser Gly  
65 70 75

Asp Lys Ala Cys Asn Leu Met Ile Phe Asp Thr Arg Lys Thr Ala  
80 85 90

Arg Gln Pro Asn Cys Tyr Leu Phe Phe Cys Pro Asn Glu Glu Ala  
95 100 105

Cys Pro Leu Lys Pro Ala Lys Gly Leu Met Ser Tyr Arg Ile Ile  
110 115 120

Thr Asp Phe Pro Ser Leu Thr Arg Asn Leu Pro Ser Gln Glu Leu  
125 130 135

Pro Gln Glu Asp Ser Leu Leu His Gly Gln Phe Ser Gln Ala Val  
140 145 150

Thr Pro Leu Ala His His His Thr Asp Tyr Ser Lys Pro Thr Asp  
155 160 165

Ile Ser Trp Arg Asp Thr Leu Ser Gln Lys Phe Gly Ser Ser Asp  
170 175 180

His Leu Glu Lys Leu Phe Lys Met Asp Glu Ala Ser Ala Gln Leu  
185 190 195

Leu Ala Tyr Lys Glu Lys Gly His Ser Gln Ser Ser Gln Phe Ser  
200 205 210

Ser Asp Gln Glu Ile Ala His Leu Leu Pro Glu Asn Val Ser Ala  
215 220 225

Leu Pro Ala Thr Val Ala Val Ala Ser Pro His Thr Thr Ser Ala  
230 235 240

Thr Pro Lys Pro Ala Thr Leu Leu Pro Thr Asn Ala Ser Val Thr  
245 250 255

Pro Ser Gly Thr Ser Gln Pro Gln Leu Ala Thr Thr Ala Pro Pro  
260 265 270

Val Thr Thr Val Thr Ser Gln Pro Pro Thr Thr Leu Ile Ser Thr  
275 280 285

Val Phe Thr Arg Ala Ala Ala Thr Leu Gln Ala Met Ala Thr Thr  
290 295 300

Ala Val Leu Thr Thr Phe Gln Ala Pro Thr Asp Ser Lys Gly

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305

310

315

Ser Leu Glu Thr Ile Pro Phe Thr Glu Ile Ser Asn Leu Thr Leu  
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Asn Thr Gly Asn Val Tyr Asn Pro Thr Ala Leu Ser Met Ser Asn  
335 340 345

Val Glu Ser Ser Thr Met Asn Lys Thr Ala Ser Trp Glu Gly Arg  
350 355 360

Glu Ala Ser Pro Gly Ser Ser Ser Gln Gly Ser Val Pro Glu Asn  
365 370 375

Gln Tyr Gly Leu Pro Phe Glu Lys Trp Leu Leu Ile Gly Ser Leu  
380 385 390

Leu Phe Gly Val Leu Phe Leu Val Ile Gly Leu Val Leu Leu Gly  
395 400 405

Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg Tyr Ser Arg Leu  
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Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile  
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<210> 84

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 84

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<212> DNA

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<223> Synthetic oligonucleotide probe

<400> 85

gaagcaagtgc cccagctc 18

<210> 86

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 86

cgggtccctg ctctttgg 18

<210> 87  
<211> 24  
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<400> 87  
caccgttagct gggagcgcac tcac 24

<210> 88  
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agtgttaagtc aagctccc 18

<210> 89  
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<212> DNA  
<213> Homo Sapien

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35 40 45  
Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg  
50 55 60  
Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala  
65 70 75  
Tyr Arg Leu Leu Ser Gly Gly Arg Ser Lys Tyr Ala Lys Ile  
80 85 90  
Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val  
95 100 105  
Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn  
110 115 120  
Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser  
125 130 135  
Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu  
140 145 150  
Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn  
155 160 165

TOP SECRET - SECURITY INFORMATION

Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser Lys Glu Ile Arg  
170 175 180

Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala Ala Lys Gly  
185 190 195

Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn His Ser  
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TOP SECRET//NOFORN

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